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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,735	08/06/2001	Masaru Kihara	249-187	3183
23117	7590	01/10/2005	EXAMINER	
NIXON & VANDERHYE, PC 1100 N GLEBE ROAD 8TH FLOOR ARLINGTON, VA 22201-4714			CREPEAU, JONATHAN	
			ART UNIT	PAPER NUMBER
			1746	

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/925,735

Applicant(s)

KIHARA ET AL.

Examiner

Jonathan S. Crepeau

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 18, 2004 has been entered.

This Office action addresses claims 1-7. The claims are newly rejected under 35 USC §103, as necessitated by amendment. Additionally, claims 6 and 7 are rejected under 35 USC §102/103. This action is non-final.

### ***Claim Objections***

2. Claim 5 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 5 recites that the reducing step involves chemical reduction with a reducing agent. However, this recitation does not appear to meaningfully limit claim 1, which recites that at least one of hydrogen peroxide, hydrazine and hydrogen iodide is used as a reducing agent. Correction or clarification is required.

***Claim Rejections - 35 USC § 102/103***

3. Claims 6 and 7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ovshinsky et al (U.S. Patent 5,523,182). In column 26, line 45 et seq., Ovshinsky et al. teach a method of preparing a positive active material by chemically oxidizing nickel hydroxide and then either chemically or electrochemically reducing it. Regarding claim 6, a positive electrode comprises a porous substrate and a slurry of the active material and a binder (see col. 10, lines 31-37; col. 21, lines 44-50). Regarding claim 7, an alkaline storage battery comprises the positive electrode, a negative electrode, a separator, and an alkaline electrolytic solution (see col. 6, line 25; claim 5 of the reference). While Ovshinsky does not appear to teach the presence of  $\beta$ -NiOOH in the active material, such compound would naturally be formed upon performing the method of Ovshinsky. Further, claims 6 and 7 are considered to be product-by-process claims. Although the reference does not teach some of the claimed process limitations (i.e., the specific reducing agents), the patentability of a product does not depend on its method of production. If the product in a product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Furthermore, once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292

(Fed. Cir. 1983). See also MPEP §2113. Accordingly, claims 6 and 7 are not considered to be distinguished over Ovshinsky.

***Claim Rejections - 35 USC § 103***

4. Claims 1-3 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ovshinsky et al (U.S. Patent 5,523,182) in view of Maruta (U.S. Patent 6,333,126).

Ovshinsky is applied for the reasons stated above. Further, regarding claims 2 and 3, a cobalt compound is coated on the surface of the nickel hydroxide (see col. 26, line 55 et seq.; col. 25, lines 33-41).

Ovshinsky does not expressly teach that the reducing agent is selected from hydrogen peroxide, hydrazine, and hydrogen iodide, as recited in claims 1-3.

Maruta is directed to a process for producing a lithium and nickel compound. In column 3, line 56, the reference teaches that nickel oxyhydroxide can be reduced by a reducing agent such as anhydrous hydrazine, among others.

Therefore, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made because the disclosure of Maruta indicates that hydrazine is a suitable material for use as a nickel oxyhydroxide reducing agent. The selection of a known material based on its suitability for its intended use has generally been held to be *prima facie* obvious (MPEP §2144.07). As such, it would be obvious to use hydrazine as the reducing agent of Ovshinsky.

Art Unit: 1746

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ovshinsky et al. in view of Maruta as applied to claims 1-3 and 5-7 above, and further in view of JP 11-144723.

Ovshinsky does not expressly teach that the average valence of the nickel is between 2.10 and 2.30, as recited in claim 4.

In the abstract, JP 11-144723 teaches a nickel hydroxide active material having an average nickel valence of 2.1 to 2.3.

Therefore, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made because the disclosure of JP '723 would motivate the artisan to adjust the average valence of the nickel hydroxide of Ovshinsky et al. to be in the range of 2.1 to 2.3. In the abstract, JP '723 discloses that this "increase[s] the discharge capacity in a high-rate discharge of a battery." Accordingly, this would sufficiently motivate the artisan to adjust the average valence of the nickel hydroxide of Ovshinsky et al. to be in the range of 2.1 to 2.3.

### *Conclusion*

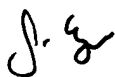
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Crepeau whose telephone number is (571) 272-1299. The examiner can normally be reached Monday-Friday from 9:30 AM - 6:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr, can be reached at (571) 272-1414. The phone number for the

Art Unit: 1746

organization where this application or proceeding is assigned is (571) 272-1700. Documents may be faxed to the central fax server at (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jonathan Crepeau  
Primary Examiner  
Art Unit 1746  
January 7, 2005